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## **BOTANICAL COMPOSITION AND THE COMPOSITION OF THE RATION OF THE EUROPEAN ROE DEER**

European Roe Deer (*S. Capreolus capreolus* L.) is the first in number among wild hunting hoofed animals in Ukraine. It is an important consume link in forest biocenosis. The study of the features of botanical composition and the composition of the roe deer diet is a very important both for the organization of hunting industry and for ecological researches.

European roe deer is the only species of roe on the territory of Ukraine; it occupies forest-steppe and steppe zones. Generally, the roe deer lives in the clear forests with big grassy glades and in various deciduous and mixed woods. The roe deer can be met on plains and plateaus covered by the cleared deciduous forests with dense underbrush and glades with motley grass. Meadows, bushes and forests are typical lands for the roe deer.

The ration of the roe deer is very diverse with different composition and different proportions of the components. The composition of the ration depends on the climatic conditions of the region and the season, on the food availability, amount of food, animal population in the habitat, as well on the physiological state of individuals.

Research of the roe deer ration in the forests of Ukrainian Polissia was carried out by the botanical analysis of the undigested remains. The rumen content was washed by running water and analyzed with lens. The forage in the rumen contained about 40 species of vascular plants, as well as mushrooms and fruits.

Some types of ferns and young shoots of ordinary pine undergrowth were identified. 18 families of dicotyledonous class and 3 families of monocotyledonous class (angiospermous species) form the roe deer ration. Species of Rosa family are widely presented in the roe deer ration. Such species as European crab apple (*Malus sylvestris*), European pear (*Pyrus communis*) and mountain ash (*Sorbus aucuparia*) are the most widespread species of Rosa family. The willow family is the second and the most often consumed by the roe deer species. Such families as Ericaceae, [Betulaceae](#), Lamiales are presented in the ration by single species. Perennial herbaceous plants are consumed more often than other representatives of monocotyledonous class. Thus, dicotyledonous are the dominant species in the European roe deer ration. It should be noted that there are essential distinctions in botanical composition of forages when comparing diets of animals of Ukrainian Polissia with animal diets of the Central Chernozem region and East Urals. According to the Russian researchers, the presence of a significant amount of grassy forages was observed. It can be explained by the distinctions in a vegetable cover. The ligneous species prevail on the territory of Ukrainian Polissia. Therefore, it is possible to draw a conclusion that the diet of the roe deer is characterized by species diversity and has a specific variety at the taxonomical level.

Features of the European roe deer ration in the forests of Ukrainian Polissia are defined not only by the botanical composition but by the ratio of components in the diet. The basis of the forage for the roe deer in this region is made by such plants as Aspen

(*Populus tremula*), Oak (*Quercus*), European blackberry (*Rubus nessensis*) and Bilberry (*Vaccinium myrtillus* L.). Depending on the season, the roe deer consumes such species as mountain ash, cowberry, heather, willow, birch and carpet bungleweed. Insignificant part of an average annual ration of the roe deer makes minor forage: raspberry, bog bilberry, hazel, maple, etc.

There are essential distinctions in the ration of the roe deer in autumn, in spring, in summer and in winter. These distinctions are shown when analyzing the consumption of specific seasonal forage. The variety of species in the ration is observed in spring and in autumn. The forage of spring diet is formed by the oak shoots and the aspen shoots, by the winter shoots of bilberry and the leafless shoots of willows. The most rich and various forage is in autumn; it consists of various wild berries, aspen shoots, blackberry shoots, bilberry shoots, acorns, apples and pears. Ramal forage is the major forage in this season. Besides, forest fruits and mushrooms also form autumn ration. Winter-green bungleweed shoots, bilberry leafless shoots, birch leafless shoots, aspen leafless shoots, green pine needles and cowberry shoots form winter ration of the roe deer. Summer ration is characterized by the smallest species diversity. Ramal forage prevails in summer and consists, mainly, of tree shoots and shrubs. Maple and purple moor-grass phytomass is typical forage of the roe deer. Irrespective of the season, the ligneous shoots also prevail in the ration of the roe deer. Thus, we can admit that Polissia roe deer is a typical shoot-eating animal.

Summarizing the research results, we can conclude that the botanical composition and the composition of the European roe deer ration in forest ecosystems of Ukrainian Polyssia significantly differ in species composition and vary depending on the season. The basis of the roe deer forage is formed by lignified shoots of woody plant undergrowth and shrubs.